
Articles

Teaching, as Learning, in Practice

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Why pursue a social rather than a more familiar psychological theory of learning? To the extent that being human is a relational matter, generated in social living, historically, in social formations whose participants engage with each other as a condition and precondition for their existence, theories that conceive of learning as a special universal mental process impoverish and misrecognize it. My colleagues and I have been trying to convey our understanding of this claim for some years (e.g., Lave, 1988; Lave & Wenger, 1991) and I will try to develop the argument a little further here. There is another sort of reason for pursuing a theoretical perspective on the social nature of learning. Theories that reduce learning to individual mental capacity/activity in the last instance blame marginalized people for being marginal. Common theories of learning begin and end with individuals (though these days they often nod at “the social” or “the environment” in between). Such theories are deeply concerned with individual differences, with notions of better and worse, more and less learning, and with comparison of these things across groups-of-individuals. Psychological theories of learning prescribe ideals and paths to excellence and identify the kinds of individuals (by no means all) who should arrive; the absence of movement away from some putatively common starting point becomes grounds for labeling others *sub-normal*. The logic that makes success exceptional but nonetheless characterizes lack of success as not normal won't do. It reflects and contributes to a politics by which disinherited and disenfranchised individuals, whether taken one at a time or in masses, are identified as the *dis-abled*, and thereby made responsible for their “plight” (e.g., McDermott, 1993).¹ It seems imperative to explore ways of understanding learning that do not naturalize and underwrite divisions of social inequality in our society. A reconsideration of learning as a social, collective, rather than individual, psychological phenomenon offers the only way beyond the current state of affairs that I can envision at the present time.

This re-envisioning is by no means simple. It requires reconsideration at many levels of alternative assumptions that might support a social understanding of learning from the ground up. Such an enterprise would not be possible today if there hadn't been changes in participants' conceptions of the field of education in recent decades. This view of the field of education is laid out by Holland and Eisenhart (1990, especially chapter 3, pp. 26ff): that in education, in the social

sciences, we have moved in the last quarter century from implicit to explicit theory, increasing our ability to reflect critically on our own research practice. It seems crucial to me, as it does to them, to base the field of education on explicit accounts of its different theoretical perspectives.

The region of social theory that seems richest in clues for how to conceive of learning in social terms, in my view, is that of historical, dialectical, social practice theory. Such a theoretical perspective takes learning to be an aspect of participation in socially situated practices. My understanding of the theoretical implications of learning as social practice could not have developed outside my research on Vai and Gola tailors' apprenticeship in Liberia, West Africa. Research on apprenticeship in West Africa casts learning in a different light. Early on in the apprenticeship research I argued that the characteristics of apprenticeship among the Liberian tailors didn't match claims about the nature of informal education, and hence the theory underlying those claims needed to be reexamined. More recently I have come to the conclusion that the "informal" practices through which learning occurs in apprenticeship are so powerful and robust that this raises questions about the efficacy of standard "formal" educational practices in schools rather than the other way around.

Further, I found that apprenticeship studies offered an especially clear window on issues about learning. But even supposing that this claim is correct, how could apprenticeship studies be relevant to learning in school settings? The argument developed by Etienne Wenger and myself (Lave & Wenger, 1991) is that learning is an aspect of changing participation in changing "communities of practice" everywhere. Wherever people engage for substantial periods of time, day by day, in doing things in which their ongoing activities are interdependent, learning is part of their changing participation in changing practices. This characterization fits schools as well as tailor shops. There are not distinguishable "modes" of learning, from this perspective, because however educational enterprises differ, learning is a facet of the communities of practice of which they are composed.

Finally, it may seem paradoxical to turn to studies of apprenticeship in developing a perspective on teaching, when apprenticeships deploy many resources for effective learning, but in most cases teaching is not the defining or most salient of these, and rather often it appears to shape learning little or not at all. Yet an argument has emerged from the apprenticeship research about the character of teaching. To begin, I shall illustrate what it means to characterize learning as a facet of social practice through two examples of apprenticeship, distant from late 20th-century public schooling in the U.S. One is the apprenticeship of Vai and Gola tailors in Liberia, the other, the learning of law practitioners in mosque schools in 19th-century Egypt. Together they help to demonstrate what it means to view "learning" as social practice, and the social practice of learning as the fundamental social phenomenon in relation with which practices of teaching are constituted. This in turn leads to a series of issues about what teaching is, from the perspective of learners learning.

Research on Apprenticeship

In the early 1970s as I was beginning apprenticeship research, Scribner and Cole (1973) articulated the common theoretical assumptions of both the psychology of learning and the anthropology of education in a justly famous article in *Science*, summing up a two-sided formal/informal education model, in which schooling was synonymous with the formal side, while apprenticeship clearly fell into the informal. Formal education was supposed to involve "out-of-context" learning in which instruction is the organizational source of learning activities; learners build understanding through abstraction and generalization, which produces less context-bound, more general understanding, and results in broad learning transfer to times and places elsewhere and later. In informal

education learning was supposed to be embedded in everyday activities, taking place through demonstration, observation, and mimesis. The product was supposed to be a literal, context-bound understanding, one not conducive to general learning transfer.

There is a set of contrasts here concerning how schooling effects were supposed to come about, and how these effects were *not* supposed to emerge in other educational enterprises, such as apprenticeship. Researchers were not talking about two different but equally good ways to learn. The model assigned positive value to the formal side, negative value to the informal. The model assigned the same basic assumptions as cognitive theories of learning—it should look familiar.

Between 1973 and 1978 I pursued my concerns about common characterizations of “informal education” in field research in Liberia, exploring the apprenticeship of Vai and Gola tailors in a very poor and marginal location at the periphery of the business district of the city of Monrovia. There were 250 masters and apprentices in the Tailors’ Alley. They made mostly ready-to-wear trousers, a pair or two at a time, working at foot-treadle sewing machines, and using the profits of one day’s sales to buy the materials to make the next few pairs of trousers. Many of the masters took a new apprentice, every few years, so that co-apprentices would be differently situated with respect to the ways in which they could participate in the ongoing life of the shop. (None of the masters were well enough off to take two new apprentices at the same time, for they would then occupy similar positions in the division of labor rather than complementary ones.) I spent many hours in tailor shops watching life proceed, getting to know the tailors and apprentices, the ups and downs of daily happenings and local gossip, while I tried to figure out what apprenticeship was all about.

Like the authors of the *Science* article, and on the basis of the Liberian research, I have since argued against many of the major assumptions in the comparative model of education, taken one at a time and in bunches: We have challenged assumptions that decontextualization is the hallmark of good learning, and have questioned the abstract and general character of what constitutes “powerful” knowing. Learning transfer is an extraordinarily narrow and barren account of how knowledgeable persons make their way among multiply interrelated settings. Distinctions between the rational knowledge content attributed to school “curriculum” and the broad moral (but simultaneously narrow skill) focus assumed for “informal education” ignore the skills and moral content of schooling and the knowledgeability that is part of all educational practices. From a perspective based on apprenticeship I have also argued against the assumption that teaching, or “intentional transmission,” is necessarily prior to, or a precondition for, learning, or that the apparent absence of teaching calls processes of learning into question.

A major aspect of the research on tailors focused on another claim characteristic of dualistic theories of learning. Such theories assume that possibilities for creative activity and the production of new “knowledge” are limited to certain kinds of education. One kind of learning is supposed to underwrite such “capabilities” while the other supposedly does not. Apprenticeship is often assumed to merely reproduce existing practices. So I was interested in the issue of whether mechanical reproduction of skill at for instance, making trousers, would be the only outcome of years of apprenticeship. I began to inquire into just what was being learned by the apprentices, and found that the apprentices were learning many complex “lessons” at once. To name a few: they were learning relations among the major social identities and divisions in Liberian society which they were in the business of dressing. They were learning to make a life, to make a living, to make clothes, to grow old enough, and mature enough to become master tailors, and to see the truth of the respect due to a master of their trade. It seems trivially true that they were never doing only one of these things at a

time. This recommended serious scepticism about the assumption that the “informally” educated should not be able to produce knowledge but only reproduce existing practice.² Scepticism on this issue basically undermines the other claims of dualist models of education and learning.

Let us turn now to my other example, concerning learning in 19th-century mosque schools in Egypt. Anthropologist Timothy Mitchell, in his book, *Colonising Egypt*, (1988) writes about the historical relations among (1) the Western obsession with representation as the mode of knowing and (2) colonial empire-building by Europeans in the Middle East. He extends Foucauldian arguments about knowledge/power relations in linking empire-building and representation practices in Europe from the 18th century to the present. He describes the pejorative contrast made by European visitors and colonial officers in Egypt, between notions of “European” order and “Egyptian” disorder as perhaps the most significant ideological tactic for deriding existing educational practices in Egypt. Indeed the colonial government quickly set about replacing the mosque schools with a system of Lancaster schools. The colonialists’ dual educational theory is consistent with that just described for the late 20th century.

Mitchell offers an alternative view of educational processes in the mosque:

Al-Azhar, the name of a particular mosque but also the general name for a group of mosques and lodgings gathered in the older part of Cairo, was not a school for law, but the oldest and most important centre in the Islamic world of law as a profession. As with other crafts and professions, one of the continuous and pervasive activities of those involved was the learning and teaching of its skills. *Learning was a part of the practice of law, and it was from this practice, rather than from any set of codes or structures, that it took its sequence and its form.* [my italics]

The process of learning always began with the study of the *Quran*, the original text of the law (indeed the only original text, the only text which could not be read in some sense as the interpretation or modification of an earlier writing). The student then moved on to the *hadith*, the collections of sayings attributed to the Prophet Muhammad which interpret and extend Quranic doctrine, and then on again to the major commentaries upon the Quran and to the other subjects dealing with its interpretation, such as the art of its recitation and the study of variant readings. From there one moved on to the studies related to the reading of the *hadith*, such as the biographies of the transmitters, then to the principles of theology (*usul al-din*), then to the principles of legal interpretation (*usul al-fiqh*), then to the divergent interpretations among the different schools of law, and so on according to a sequence given in the reading and interpretation of the law, *which was the nature of the art being studied* [my italics]. Though the choice of secondary texts might vary, there was no need of a syllabus or curriculum. The order of learning disclosed itself, by the logic of interpretation, in the order of the texts.

In the same way, there was no need for a daily timetable. The ordinary sequence of the day’s lessons mirrored on a smaller scale the same textual order. The first lessons would be given immediately after dawn prayers, by those teaching the *Quran*. These were followed by lessons in *hadith*, followed by Quranic interpretation, and so on, working outwards eventually to the study of mysticism, left to the period after evening prayer. The order of teaching, in other words, even the order of the day, was inseparable from the necessary relation between texts and commentaries that constituted legal practice. Practice was not something organised within the indifferent order of the timetable; it unfolded in its meaningful sequence.

The sequence of learning was also the sequence of scholarship. A scholar at al-Azhar, we are told, would prepare a legal opinion, a lesson, or a disputation, by placing all the books which discussed the question he wanted to elucidate on a low table in front of him, arranging them in sequences radiating from the middle: ‘at the centre is the original text (*matn*), then the commentary (*sharh*) on this text, then

the gloss on the commentary (*hashiya*) and finally the explication of the gloss (*takrir*). The books often repeated this arrangement themselves. . . : a text might be accompanied by a commentary written between the lines, or even inserted between the words themselves, with a further gloss upon the commentary written in the margin, surrounding the text on all sides, just as the circles of commentaries on the table surrounded the central text.

There were other respects in which *the patterns of learning were repeated in the forms of legal practice*. The lessons in which the works of law were read took place with the participants seated in a circle, each participant's place in relation to the teacher determined by his or her command of the text being studied. Again the process of mastering the art was what gave learning its order. The circle of participants, in fact, was the common form of all the aspects of the legal profession carried on within the mosque. It was variously used to hear cases and issue opinions, to dispute questions of law, to deliver addresses, and to dictate and discuss the texts. *The activity of learning, in other words, was simply one aspect within the daily practice of the law.* (Italics mine, 1988, pp. 82-84)

In short, the substantive relations among kinds of texts and interpretive practices, were reflected in these and the sequence in which texts were studied, the arrangement of apprentices and scholars with respect to each other while studying or practicing law, the order of lessons on the texts throughout the day, legal scholarship, and legal practice, were all part of the ongoing practice (of which learning was an integral part) so that the apprentices learned about the texts, scholarship, the round of daily life of masters, and the practice of law while engaged in life each day at the mosque. And the masters likewise. Mitchell has captured in his analysis of the mosque schools the integral character of learning in the practice (of law), and he shows us just how various dimensions of life are saturated with the significant patterns of law practice, so that it was part of many aspects of social life for its participants. This work, which goes against the grain of common readings of educational practice both then and now, offers an extraordinarily delicate and insightful perspective on learning as social practice.

It is not entirely without problems. Mitchell's interpretation involves an uncritical acceptance of the idea that the masters who are practitioners of law are also teachers of apprentices, while his own account of their daily practices denies this division. Indeed, this work raises questions about what teaching *is*, from the perspective of learning. In Liberia it appeared that masters were most importantly embodied exemplars of what apprentices were becoming. The law practitioners fit this description also. And as Mitchell describes them, it is not difficult to imagine them as changing learners themselves as their engagement in the many day to day activities in the mosque change through time. Some of these characteristics overlap with those typically ascribed to "teachers," but not all. Also, an apprentice law practitioner is not alone with a master, rather both are participants in larger, varied, constellations of participants. Much of what is attributed to "teaching" by Western interpreters of these settings is almost certainly crucially made in relations among near peers. We do not know enough about how these relations generate, recontextualize, interrupt, conflict with, and enrich the multiply-sited cultural patterning of the practice in question.³

Before turning the discussion further to processes of teaching, I want to underline similarities between learning processes in tailor shops in Liberia and in the mosque school. In becoming acquainted with the sequence of garments they were learning to make, tailors' apprentices were learning as well the sequence and relations of informal and marginal to formal and socially important clothing, social categories, and occasions. The shifting practice of tailoring across the lifetime, the daily round of life as a master, and the practice of learning to tailor were all similarly patterned but differently lived aspects of life in the tailor shops. Presumably these are common parts of all effective learning practices, breaking down distinctions between learning and doing, between social identity and knowledge, between education and occupation, between form and content. And at the same time

they suggest that intricately patterned relations between practices, space, time, bodies, social relationships, life courses—ubiquitous facets of ongoing communities of practice—are both the content and the principle of effectiveness of learning. These examples offer grounds for arguing that their multiply, richly structured processes of learning look very different from the impoverished simple, non-creative task learning more conventionally associated with apprenticeship.

It is now possible to take a long view of the research on tailors' apprenticeship, and to see fairly clearly how it transformed my understanding of learning in three major respects. First of all, I admired the Vai and Gola tailors' apprenticeship, while (according to the values embedded in the formal/informal model) I should reserve my admiration for schooling. This opened the value-laden meaning of each part of the model to a new perspective and the possibility of new conclusions. Why was the tailors' apprenticeship an appealing kind of educational practice? I happened upon a case of enormously effective education, benign (and inexpensive). The result, for very poor people who might be expected to experience their lives and themselves as miserable in all senses of that word, was a strong sense of their worth and self-respect. They were without a doubt poor, *and* able, respected and self-respecting, with a "take" on the world that had a considerable penetration of the real conditions of their lives. Eighty-five percent or more who started as tailors' apprentices finished, and continued their practice as tailors. In short, given dualist beliefs about apprenticeship in contrast with school learning, the asymmetrical value placed on the two sides shifted to a view that valued apprenticeship positively. This shift in view did not lead to an argument that school should be replaced by apprenticeship or that apprenticeship should displace teachers from classrooms. Neither U.S. school practices nor Liberian apprenticeship can be copied into other times and places, for they are historically, socially situated practices, deeply interconnected with other practices beyond their immediate purview. Rather, it led to the view that better understanding of learning in apprenticeship settings might be a resource in better understanding how learning transpires in other historical circumstances, including U.S. schools today.

Second, research on apprenticeship transformed my understanding of just *who* the central actors are in theories of socialization, cultural transmission, or learning. From the point of view of the dualist formal/informal model, indeed cognitive theory in general, culture becomes shared via cultural *transmission*. It is the transmitter's point of view that is implicitly privileged. By contrast, one central point of the apprenticeship research is that learning is the more basic concept, and that teaching (transmission) is something else. Teaching certainly is an object for analytical inquiry, but not an explanation for learning. Indeed, whole apparatuses of explanation for learning become merely cultural artifacts about teaching—in need of explanation—when learning is taken to be the basic concept. Our understanding of both learning and teaching are thus problematic, inviting new analysis, which in turn requires novel analytical units and new questions.

The third transformation growing out of the research on West African tailors' apprenticeship concerns the situated character of activity in the daily practices of people's lives. The tailors' apprenticeship as a whole was an elegant illustration for this. Yet there is nothing even revisionist about recognizing the situated character of apprenticeship. After all, the concrete, "context-embedded," immediate confinement of learning in educational forms such as apprenticeship is basic in claims of dualist theories of learning.

Such theories insist on the importance of distance, perspective, and disengagement from immediately relevant practical concerns in order for powerful, knowledge-producing learning to occur (assuming that other educational experiences such as apprenticeship cannot produce it). But there was

another facet of the research on Vai and Gola tailors that made possible an attempt to break with the dualistic view of context-embedding. In order to develop a critique of cross-cultural research on learning transfer, I had invented a dozen “learning transfer” experiments in an attempt to test widespread assumptions that schooling provided a unique kind of mental training. Math seemed to be a reasonable subject for these experiments, for transforming quantities was part of both Liberian school and tailoring practices. After much analysis of experimental protocols describing the problem-solving activity of the tailors, it became clear that whether the tailors had been to school or not, they worked on math in tailor shops very differently than in the experiments. This led me back to the tailor shops for another round of ethnographic fieldwork to try to characterize everyday math. The differences were striking, leading to the conclusion that the tailors’ math practices—that were supposed to be quintessential “formal,” “abstract,” “decontextualized” kinds of knowledge from the point of view of the formal/informal model—were socially situated, and had a contextually embedded character. This in turn led to the conclusion that it was not just the informal side of life that was composed of intricately context-embedded and situated activity: there is nothing else.

And further, if there is no other kind of activity except situated activity, then there is no kind of learning that can be distinguished theoretically by its “de-contextualization,” as rhetoric pertaining to schooling and school practices so often insists. This has two implications at least: (1) that decontextualization practices, are socially, especially politically, situated practices (Lave, 1993)⁴; (2) examples of apprenticeship, which do not mystify and deny the situated character of learning, offer an easier site for the understanding and theorizing of learning than do schools. For the latter institutionalize, and are predicated on, widespread beliefs about learning that are called into question by views of learning as situated activity. It suggests that new research questions are in order, about how learning—in-practice is characteristic of schooling.

The research on the tailors did not result immediately or even very soon in an alternative to the theory for which it offered a critique. It did impel me to go looking for ways to conceptualize learning differently, encouraged by those three interconnected transformations that resulted from the project: (1) a reversal of the polar values assumed to reflect differing educational power for schooling and “other” forms of education; (2) a reversal in perspective so that the vital focus of research on learning shifted from transmitters, teachers or care givers, to learners; and (3) a view of learning as socially situated activity. This work couldn’t replace existing theories, but it provided incentives to ask new questions about learning.

From Apprenticeship to Social Practice Theory

Those new questions included, among others: What are theories of learning “about?” What is a theory of learning? What would happen if we stopped reifying learning and began to think of learning as something historically specific? These questions were taken up in a series of seminars: a reading group at the Institute for Research on Learning at a certain productive moment in its history, a seminar with Paul Duguid on the educational implications of early British cultural studies at the University of California at Berkeley, a seminar on Subjectivity and Social Practice with critical psychologist Ole Dreier from Copenhagen University, and a seminar on Everyday Life and Learning with Martin Packer. As colleagues and students we have explored these issues over the last half dozen years or more.

First, we asked ourselves, what are theories of learning *about*? I suspect the most common assumption is that they are about individuals’ psychological processes. But in a way, though worth

critical examination, that's beside the point. What seemed far more startling is the incredibly narrow, pervasive history of philosophical and later psychological treatments of "learning" as wholly an epistemological problem—it was all about knowing, acquiring knowledge, beliefs, skills, changing the mind, moving from intuitions to rules, or the reverse, and that was all. Just as the history of philosophy is sometimes characterized as an abstract individualist or "third person singular" project, so, by only a very slight disciplinary shift and extension, is the project of theorizing about "education," knowledge, culture, and their production and reproduction.

Second, we began to wonder about theories of learning themselves. Martin Packer and I decided to explore the social theoretical underpinnings of theories of learning and everyday life, since clearly they were intertwined and also displayed interesting differences.⁵ The first breakthrough was Martin Packer's. He wanted to know what *is* a theory of learning. I could point to some, but had no idea what one was. He only asked because he already had an answer in mind: At minimum, he proposed, a theory of learning consists of three kinds of stipulations: a *telos* for the changes implied in notions of learning; the basic relation assumed to exist between subject and social world; and mechanisms by which learning is supposed to take place.

1. *Telos*: that is, a direction of movement or change of learning (*not* the same as goal directed activity),
2. *Subject-world relation*: a general specification of relations between subjects and the social world (not necessarily to be construed as learners and things to-be-learned),
3. *Learning mechanisms*: ways by which learning comes about.

We found this a liberating analytic tool. It consisted of a set of questions for interrogating anything claiming to be an example, or for that matter a theory, of learning. It provided a way to organize our understanding around an inventory of things it seemed essential to know in every case. It gave us a kind of creative license to play with what learning might be about. Further, the notion of *telos* seemed useful in turning the focus away from a vista of educational goals set by societal, cultural authorities, which would make teaching the precondition for learning. It encourages instead a focus on the trajectories of learners as they change. "Learning mechanisms" also seem obviously relevant to understanding how learning comes about.⁶ The centrality of assumptions about subject-world relations may seem less obvious. But different epistemologically-based theories depend on the variable answers to two questions: Where does reality lie (in the world or in the subject)? and how can we come to know it (depending on where "it" is). And if one adopts the perspective proposed here, the subject-world relation is central also, though conceived differently. The question is, "how is the objective world socially constituted, as human beings are socially produced, in practice?" Rejecting the analytic philosophical distinction between persons and things, this question presupposes that social becoming is fundamental to all other social processes (Bernstein, 1971). Any way you look at it, subject-world relations are at the crux of differentiation of one theory of learning from another.

We can now turn back to the 19th-century mosque school for scholarly/law practice to consider how this way of conceiving of theories of learning could be addressed to specific educational practices. Conventional views on everyday learning would argue that those becoming law practitioners were marginalized learners, engaged in a disorderly process of rote reproduction of existing practice, as they memorized a limited corpus of written texts, in a haphazard way that would easily account for the narrow and merely reproductive character of what the would-be lawyers could learn. By contrast, the view derived from social practice theory is that Egyptian law-apprentices were engaged in long term projects as persons becoming "lawyers" known for their learned practice.

The *telos* of tailors' apprenticeship in Liberia and legal learning in Egypt was not learning to sew or learning texts, not moving towards more abstract knowledge of the law or separation from everyday life into specialization of production skills or special generalization of tailoring knowledge. Instead, the *telos* might be described as becoming a respected, practicing participant among other tailors and lawyers, becoming so imbued with the practice that masters become part of the everyday life of the Alley or the mosque for other participants and others in turn become part of their practice. This might even be a reasonable definition of what it means to construct "identities in practice." It seems that the tailors and law participants, as subjects, and the world with which they were engaged, mutually constituted each other. That is, of course, the subject-world relation implied in a social ontological, historically situated, perspective on learning.

Learning mechanisms. Rather than particular tools and techniques for learning as such, there are ways of becoming a participant, ways of participating, and ways in which participants and practices change. In any event, the learning of specific ways of participating differs in particular situated practices. The term "learning mechanism" diminishes in importance, in fact it may fall out altogether, as "mechanisms" disappear into practice. Mainly, people are becoming kinds of persons.

The third question that we explored was what would happen if we took the collective social nature of our existence so seriously that we put it first; so that crafting identities in practice becomes the fundamental project subjects engage in; crafting identities is a *social* process, and becoming more knowledgeably skilled is an aspect of participation in social practice. By such reasoning, who you are becoming shapes crucially and fundamentally what you "know." "What you know" may be better thought of as doing rather than having something—"knowing" rather than acquiring or accumulating knowledge or information. "Knowing" is a relation among communities of practice, participation in practice, and the generation of identities as part of becoming part of ongoing practice.⁷

Teaching in Schools

At this point I want to turn to a particular historical moment in which participants in certain communities of practice are separated into teachers and students: schools in the U.S. today. In such settings teachers are ubiquitous. People who have attended school for years may well assume that teaching is necessary if learning is to occur. Here I take the view that teaching is neither necessary nor sufficient to produce learning, and that the social-cultural categories that divide teachers from learners in schools mystify the crucial ways in which learning is fundamental to all participation and all participants in social practice.

The way we conceptualize teaching must be rethought within the perspective that takes learners, learning, as the fundamental phenomenon of which teaching may (or may not) be a part. Learning, taken here to be first and principally the identity-making life projects of participants in communities of practice, has a crucial implication for the teaching in schools: The powerful, multiply structured processes of learning in school settings encompass and *subsume* what is generally assumed to be the more dominating agenda of school classroom teaching. Classroom "instruction" in schools falls into that subsumed part. This implies that school teaching has as a condition of possibility other aspects of learners' learning projects. Whether and how classroom activities result in the incorporation of class activities into the life projects of students (and all others in schools), depends on the ways they are taken up in those life projects. This suggests a radically different proportionality for the role of classroom teaching in the learning that indubitably goes on in schools.

Teaching, by this analysis, is a cross-context, facilitative effort to make high quality educational resources truly available for communities of learners. Great teaching in schools is a process of facilitating the circulation of school knowledgeable skill into the changing identities of students. Teachers are probably recognized as “great” when they are intensely involved in communities of practice in which their identities are changing with respect to (other) learners through their interdependent activities.

It is difficult to find research on learning that focuses on great learners learning, but it rarely focuses on great teachers teaching either. Research on learning is mostly research on “instruction,” on depersonalized guidelines for the teaching of specific lesson-like things in school settings in order to improve learning. The “teaching” that “learning research” is research *on* has no recognizable relationship to the creative, productive work that arouses admiration for great teachers. Yet it seems likely that most people who devote their lives to education do so in part because they have been deeply affected by one or more.

It may be worth inquiring how it is that most of us are able to remember great teachers, but do not have routine ways to talk about what great teaching is. And if we cannot even talk about it, it is surely difficult to build into research/practice on learning. Our poverty is a symptom of a general difficulty with much educational research. A close reading of research on how to improve learning shows that questions about learning are almost always met by educational researchers with investigations of teaching. This disastrous shortcut equates learning with teaching.⁸ It reduces teaching to narrowly specific prescriptions for what should be transplanted into the heads of kids. It takes the teacher out of the teaching. It reduces teaching to curriculum, to strategies or recipes for organizing kids to know some target knowledge. It also takes learners learning out of the picture. The circumstances are very like those analyzed by critical psychologists, (e.g., Dreier, 1993) with respect to the difficulties encountered by practitioners of family therapy. Neither therapist nor client (read teachers and students) participate in their joint activity as clearly located subjects. Therapists take charge, via interpretation, of characterizing the subjectivity of the clients, and direct their own actions towards clients in terms of those interpretations. When it comes to their own participation, therapists reduce it to the view that they are acting on behalf of the clients, as if they had no situated reasons, interests, goals, or concerns of their own that enter into and affect what transpires.⁹ The result is that it is not clear what it means for either kind of participant to engage in therapeutic activity, as each is characterized only through the other. A similar situation governs much research that purports to be about learning. It deprives us at one and the same time of clear analyses of learners as subjects—and of teachers as subjects as well.

I have several reasons, then, for proposing that we should address questions about teaching through research focused on learners learning. The requirement that we treat both learners and teachers as subjects in their own right recommends the importance of looking at each as a located participant, and at their relations with one another, (rather than at some subject-less displacement of those relations into “instruction”) if we wish to understand teaching as participation in ongoing practice. Further, if teachers teach in order to affect learning, the only way to discover whether they are having effects and if so what those are, is to explore whether, and if so how, there are changes in the participation of learners learning in their various communities of practice. If we intend to be thorough, and we presume teaching has some impact on learners, then such research would include the effects of teaching on teachers as learners as well. Together these comprise a short agenda for research on teaching.

But beyond this it seems useful to begin with learners, because they constitute the working conditions for teaching rather than the other way around. Given teaching work as defined here, teachers need to know about the powerful identity-changing communities of practice of their students, which define the conditions of their work. It is a puzzle, however, as to where to find them, and how to recognize them, if the teaching work found in, say, U.S. high schools is subsumed in processes by which students' identities change, rather than setting an agenda that takes precedence over students' life projects.

It may be of value to look for effects in high schools similar to those described for the studies of the Vai and Gola apprenticeship and the learning and practice of law in mosque schools in 19th-century Egypt. Each was impressively effective in the production, sustenance, and transformation of participants' knowledgeable identities, because the order, meaning, and substance of these practices converged in so many registers—where and how people arranged their bodies and how these related to what different people were and knew, the different but interconnected and interdependent daily round of activities of differently situated participants, the practice at its most substantive, learners' careers, and the careers of participants already in place.

In what central ways do bodies, trajectories, timetables, daily practices, and changing careers create registers of identity-changing activity among learners in American schools? One powerful multiply-sited, intersecting, identity-producing effect of school communities of practice is racialization. The generation of identities, knowledge and meaning in racial terms is so salient in the U.S. that racial meanings are generated both in the presence and in the absence of given ongoing activity. Other powerful effects of school communities of practice involve the production of social class divisions and unequal gendered identities. Racialization, gender-, social class-, and sexual orientation-making are aspects of American adulthood that kids are deeply engaged in constituting among themselves. Like the tailors' apprentices in Liberia they are learning in practice the salient social divisions and identities of the social formation in which they live their lives.

One way to get at these learning practices in the ongoing communities of practice of American schooling is obliquely, through an examination of the experiences immigrant children undergo in the process of "Americanization" for which schools are held very much responsible.¹⁰ These issues have been explored recently in a two-year ethnographic study of a high school near San Francisco that has seen a large increase in immigrant children in the last 10 years (Olsen, 1995). Olsen's dissertation explores the processes of Americanization in which newcomers from around the world participate in various ways and to different degrees. She concludes that in complex and unintended ways Americanization, in practice, is a process of racialization of social relations and identities (and thus of "knowledge" as well).

Olsen points out that the issues about immigration and schooling which are convulsing public politics and schools alike in California, have shaped U.S. high schools over at least the last two centuries. The notion of schooling as the major means to integrate/assimilate immigrant populations led first to the creation of common schools nearly two centuries ago and then to the introduction of tracking in comprehensive high schools a century later (Olsen, 1995). So the historical structuring of schools in many ways embodies practices of "Americanization."

There are very few discussions of what, in practice, for immigrant kids in high schools, Americanization *consists*. There is, according to Olsen, an official position in the school she studied: Administrators and teachers were of the opinion that, like American society, the high school is

multicultural and relatively harmonious, a place where students with different social origins freely intermingle. They felt that newcomers from outside the U.S. must first and foremost learn to speak English so that they would be able to join in American life. For teachers and administrators, Americanization is primarily a language (perhaps culture) issue. The school does its job by teaching English as a second language.

In general, with brave exceptions, the school administrators and almost all the teachers are silent to each other and to the students about racial segregation, racism, and sexism.¹¹ Asked to produce a social map of the school they divide students along three academic tracks. Teachers with more seniority receive desired higher-track teaching assignments. Their careers and their positioning in relation to one another reflect the ordering of time, space, social categories, and activity in those tracks in their daily locations, schedules, work assignments, and shared students. The classes students take are tracked, and the classes in different tracks are very different from each other.

In keeping with the perspective under discussion here, Olsen explored Americanization-in-practice through the perspectives most especially of students, both immigrant and not. Among other things, she asked groups of students, immigrant and non-immigrant, to make social maps of the school.¹² Their maps displayed no tracks—they didn't register activities in classrooms at all. Their maps had no (immediate) congruence with the teachers' maps. Non-immigrant students started by noting where different groups of students "hang" (in their daily round of activities). The categories they describe are racial ones—a world filled exclusively with "black," "brown," "white," and "yellow" young women and men. Students described as painful and difficult the practices by which they separated themselves into racial groups and practiced daily coexistence. It took skill and coordination to bring this off. Immigrants appear on these maps not at all, or as a single category, undifferentiated by national or linguistic origins—just "immigrants."

Immigrant students also produced maps that located groups of students that "hang" together, most often in terms of the geography of students' national origins and languages and length of time in the United States. So their "reading" (of what for non-immigrant Americans are diversities of race and ethnicity) is one of nationality, national language, and historical differences in the timing, circumstances, and meaning of leaving countries or continents at given historical moments and arriving in the U.S. likewise. Olsen documents the process by which immigrant children become participants, often tenuously, in the ongoing social life of the school, coming to "hang" with other students, with whom they share teachers, classes, and a track. For immigrant students, then, Americanization, or "assimilation," is first and foremost a process of racialization through the practices of their daily lives, whether in the official sites of tracked classrooms or in the students' social sites of gathering and socializing. It involves transforming their identities, in spite of deep perplexities over poor correspondences, from national to racialized ones.

This is an all-consuming job for children nearing adulthood, reason enough to explain why most curricular "innovations" or teaching methods designed to improve teaching in classrooms have little effect and short lives. But contemporary examples exist in which the task of teachers has been reconceived as activity directed "into" the ongoing processes high school kids engage in changing identities, with startling results. One such example is to be found in work begun by Margaret Carlock a few years ago to generate a chemistry program aimed at non-wizard students in an East Bay high school.¹³ This program ballooned in numbers of students, students who learned chemistry so well that, incidentally, they made record national test scores in record numbers, over a period of years. The problem as the teacher construed it was to figure out how to make it possible for students to participate

intensively in chemistry as part of their collective identity-changing lives. This involved a complex process of transforming the chemistry lab space into one whose social organization was very much shaped by the students, with laboratory and class work collaboratively developed with students, breaking lines between teaching and learning as all learners became tutors; drawing students in through tutoring arrangements that created opportunities for kids to engage with chemistry first for purposes of helping others and through that, to deepen their engagement with chemistry as an object of study. In various ways she made students dependent on each other for much of what was to be learned. Together they created multiple settings for the community of chemistry learners as the ski club became the project of chemistry students and its outings the site of chemistry work. She suggests that the way to evaluate the results is by how much talk there is about chemistry among students in the cafeteria. Carlock's knowledge of chemistry and of how to make it available to students was a critical part of this effort. But instead of "teaching chemistry" she engaged in a different kind of "learning practice," making it possible for chemistry to become part of the hard work of learners who were becoming gendered, racialized, classed adults—in this case adults with an impressive interest in chemistry.

Conclusions

I began by arguing the importance of exploring a social rather than psychological theory of learning, motivated in part by a concern not to add blame for "failure to learn in school" to other burdens of social marginality. It is not accidental that the path from this concern to a theoretical perspective that takes learning to be an aspect of social practice led through a close examination of marginalized cultural-historical formations, and through theoretical ideas at the peripheries of the intellectual fields of social theory, anthropology, and education. Where better to engage in a process of demystifying the central tenets of theory and society alike than from the suppressed poles of the dualisms that justify contemporary denigrating practices (Stallybrass & White, 1986)?

The paper set out, therefore, to describe what happens when a theoretical perspective loosely labeled "social practice theory," is employed as the basis for analysis of learning in very different settings. It began with an exploration of changing interpretations of one ethnographic example, that of the Vai and Gola tailors in Liberia. The second was an historical example generated for other purposes, and about another epoch. Both the Liberian and Egyptian examples focused on specialized preparation of adult practitioners, as a process of interdependent learners learning, not as an effect of teaching. We then turned to other examples, in American high schools, to discuss both learning and the practice of teaching in the lives of students both outside and inside classrooms. School teaching is a special kind of learning practice that must become part of the identity-changing communities of children's practices if it is to have a relationship with their learning. As for the different ways in which social circumstances for learning are arranged: through these examples I have tried to show that common assumptions about supposed differences among modes of education and their outcomes are more apparent than real. By this argument it is counterproductive to compartmentalize the West from the rest, socialization from specialized education, so-called informal from formal educational endeavors, and classroom learning from everything else. Because learning, wherever it occurs, is an aspect of changing participation in changing practices.

This is not, however, a claim for a theory of universal learning mechanisms. Quite the opposite. There are enormous differences in what and how learners come to shape (and be shaped into) their identities with respect to different practices. Going back to the examples again, the garment inventory of the tailors, the relations of the different commentaries to the *Quran*, and the racialized "curriculum"

of spaces and sequences of participation dividing and reassembling children, teachers, and administrators in the high school are substantive, situated, and historically specific. Researchers would have to explore each practice to understand what is being learned, and how.

At the same time, the conditions for the transformation of persons are the same whether the *telos* of learning is movement towards growing "up" from babyhood, or from adolescence, becoming a craftsperson or a philosopher, and/or becoming a marginal person in a world where participation in and thus learning divisions of race, ethnicity, social class, gender, and sexual preference, determine strongly who is consigned to the advantaged cores and disadvantaged margins of society.

This perspective on learning has methodological implications, in the narrow sense. Ethnographic research is a good way to come to understand learning as part of practice. It is useful for trying to focus on the specifics of changing participation in changing practices, most especially on learners' changing conditions and ways of participating. At the same time it requires commitment to an inclusive focus on all participants equally, as each contributes to the making of differences of power, salience, influence, and value of themselves and other participants.

For educational researchers whose major identity is in research on schools, the approach taken here recommends research to establish the locations in which and the processes by which the most potent identity-constituting learning conjunctures occur. This requires refusal to take as given the hierarchical social divisions among participants, among activities and settings that seem "natural" to schools in pursuing research designed to look for intense foci of identity-changing activity. For researchers whose major identity is in research on the teaching of high culture in school settings, the key questions revolve around how to make pedagogic situations (organized to produce deeper scholastic understanding) effectively available to the school-specific, identity-changing participation of kids together in their own lives. Those most concerned with relations between learning and teaching must untangle the confusions that mistakenly desubjectify learners' and teachers' positions, stakes, reasons, and ways of participating, and then inquire anew about those relations. And for researchers concerned most especially with the conditions and effects of public schooling practices of xenophobia, racism, sexism, and homophobia on what is learned in schools, the argument made here recommends research on understanding how schools *in particular ways*, ways not identical with the xenophobia, racism, sexism, and homophobia structuring other social institutions, make the learning of these divisions in practice ubiquitous. Any or all of these would be useful next steps in ongoing research on learning (and teaching) as social practice.

Notes

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¹ This perspective on theories of learning is worked out in detail elsewhere (Lave, in press). It is summed up here to indicate, much too briefly, the context for the present argument.

² It might seem (barely) plausible to talk about learning by imitation or the mechanistic reproduction of existing practice if “informal education” were equated with narrowly specific tasks, e.g., to sew seams straight, or make “standard” pairs of trousers. But this is absurd once it is clear that learning to make trousers is part of vastly more complex and extended relations, times, places, and meanings.

³ The significance of multiple setting activity in constituting learning identities seems increasingly crucial to research on social practice. Dreier (e.g., 1994) has generated a theoretical framework for such research and a rich example in his analysis of the process of family psychotherapy as constituted in both therapeutic and domestic settings. Osterlund (Aarhus University Masters thesis, 1996) offers another example, concerning newcomers becoming salespersons, which requires them to mediate between their own company and the companies to which they sell products and services.

⁴ Schools reproduce themselves in this society in part by inculcating decontextualization practices, a brilliant point developed by Minick (1993).

⁵ The term “everyday” has become salient in efforts to develop more socially-grounded approaches to cognition, thinking, and speaking, and in anthropological and linguistic studies of social practice. To the extent that it is used casually as an equivalent to “social practice” or “situated activity,” it requires investigation as to its own role in the recent history of social thought.

⁶ More recently I have come to question both the characterization of learning processes in terms of “mechanisms,” and the reification of learning as a separate kind of process (Lave, in press). Nonetheless, as a means to compare existing theories of learning it has been useful.

⁷ Eckert’s analysis of the formation of jock and burnout identities in American high schools makes this point elegantly (Eckert, 1989, 1990). She gives an especially interesting account of contrasting participation of jocks and burnouts in their various communities of practice that involve different processes of knowing in practice.

⁸ This is not a new point: Klaus Holzkamp (1987) explored these issues some years ago.

⁹ McNeill’s (1986) description of teaching in U.S. high schools can be read in this way.

¹⁰ Another powerful, oblique approach to processes of racialization is to be found in the research of Nadine Fernandez (Doctoral dissertation, forthcoming, Department of Anthropology, University of California, Berkeley. *Race, Romance and Revolution: The Politics of Interracial Couples in Cuba*. See also, in press, *The Color of Love: Young Interracial Couples in Cuba*. *Latin American Review*). Fernandez’ study of interracial romantic relationships in socialist Cuba addresses the working out of racial identities in relations of class and gender.

¹¹ See the work of Holland et al. on official silence about race/gender issues among grade school children in a recently desegregated school (Eisenhart & Holland, 1983; Holland, Eisenhart, & Harding, 1979).

¹² The differences among teachers’, “U.S.-born” students’ and immigrants’ views on the social diversity of the school are obviously important in constituting the school as an institution. It doesn’t have a unitary meaning, purpose, or activities, and the meaning of one set of participants is contested by others. This is a good illustration of the complexity and conflicting understandings that make up any “community of practice.”

¹³ Margaret Carlock, Ph.D. student, Graduate School of Education, University of California, Berkeley, is currently writing her Ph.D. dissertation on her work teaching chemistry at the high school.

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